THERMOCHIMICA ACTA, VOLUME 117 (1987)

AUTHOR INDEX

Allan, J.R. 51

Bargallo, L. 283
Basnet, R.B. 291
Beaumont, P.C. 51
Benayad, B. 177
Bhatnagar, H.L. 139, 187
Birkinshaw, C. 365
Blesa, M.A. 325
Boinon, B. 177
Borrás, J. 135
Borrull, F. 89, 283
Buggy, M. 365

Calull, M. 89
Campanella, L. 297
Cerda, V. 283
Chowdary, M.C. 385
Crăciun, C. 25

Daly, S. 365
Dębiński, H. 1
Della Vedova, C.O. 325
De Robertis, A. 317
De Stefano, C. 317
Dollimore, D. 331
Dosch, E.L. 45

Eatough, D.J. 37

Filipek, E. 9

Gantar, D. 227
Garcia, B. 219
Garg, B.S. 291
Ghosh, J.K. 73
Girgis, B.S. 127
Gómez-Estévez, J.L. 105
Guasch, J. 283
Gunjikar, V.G. 201
Gur, I.S. 139

Hansen, L.D. 37
Hassanein, M. 17
House, J.E. 371, 375

Inerowicz, H. 237

Jain, P.C. 97
Jain, R.K. 187
Jere, G.V. 73
Jiménez, A. 135
Jiménez, H. 135

Kokkonen, P. 79
Kurzawa, M. 9

Lajunen, L.H.J. 79
Lal, K. 187
Libuś, W. 237

Macindoe, L. 51
Marangoni, G. 115
Marcé, R.M. 89
Mensing, C. 261
Meucci, C. 297
Milburn, G.H.W. 51
Misra, K. 245
Montheard, J.P. 177
Morando, P.J. 325
Mushran, V. 245

Ortega, J.C. 219

Palepu, R. 115
Palmu, L. 79
Pandey, J.D. 245
Pando, C. 271
Petro, N. Sh. 127
Piacquadio, N.H. 325
Prabhakar, L.D. 385
Prakash, K.M.M.S. 385

Rahten, A. 227
Rai, R.D. 245
Rajasekhar, P. 379
Ramachandra Rao, A. 139
Reddy, K.S. 379
Renuncio, J.A.R. 271
Rodante, F. 167
Rosati, R. 167

Sanahuja, A. 105
San Millán, R. 271
Santandrea, R.P. 261
Serageldin, M.A. 157
Shukla, A. 245
Singh, R.P. 291
Singh, S. 291
Sinha, A.P.B. 201
Srivastava, A. 201
Stangret, J. 237
Sullivan, A. 115
Szpakowska, M. 59

Tahir, F.M. 371, 375
Tomassetti, M. 297
Tomellini, R. 297

Uruska, I. 59

Volavšek, B. 227
Von Schnering, H.G. 261

Walczak, J. 1, 9
Wang, H. 157
Wendlandt, W.W. 45
Werninck, A. 51
White, J.J. 365

Yadav, Y.S. 97

THERMOCHIMICA ACTA, VOLUME 117 (1987)

SUBJECT INDEX

Acetonitrile,
viscosity and densities of binary mixtures of acetonitrile with substituted anilines. Part 4 (Palepu et al.) 115
binary liquid mixtures of acetonitrile with methyl, ethyl, n-propyl and n-butyl benzoates. Variation of viscosities with temperature and composition (Garcia, Ortega) 219
Acetylenedicarboxylic acid compounds,
thermal studies on acetylenedicarboxylic acid compounds of iron(II), cobalt (II), nickel(II), copper(II) and zinc(II) (Allan et al.) 51
2-Acetylpyridinethiosemicarbazone (2-APT),
thermodynamic stabilities of lanthanide complexes of the biologically active complexing agent, 2-acetylpyridinethiosemicarbazone (2-apt) (Singh et al.) 291
Alkali metal,
chemistry and structural chemistry of phosphides and polyphosphides. 45. The thermal decomposition and thermodynamic properties of the alkali metal phosphides $LiP_{15}(s)$, $NaP_{15}(s)$, $KP_{15}(s)$, $RbP_{15}(s)$ and $CsP_{15}(s)$ (Santandrea et al.) 261
Anilines,
viscosity and densities of binary mixtures of acetonitrile with substituted anilines. Part 4 (Palepu et al.) 115

Benzoates,
binary liquid mixtures of acetonitrile with methyl, ethyl, n-propyl and n-butyl benzoates. Variation of viscosities with temperature and composition (Garcia, Ortega) 219
Bismuth citrate,
thermoanalytical studies of zinc citrate, bismuth citrate and calcium citrate (Srivastava et al.) 201

Calcium citrate,
thermoanalytical studies of zinc citrate, bismuth citrate and calcium citrate (Srivastava et al.) 201
Celloboise halobenzoates,
thermal studies on cellobiose and cellobiose halobenzoates (Ramachandra Rao et al.) 139
Cellulose,
thermal and spectroscopic studies on C-2, C-3 and C-6 substituted cellulose with different groups (Jain et al.) 187
Chlorinated polyethylenes,
effect of operating parameters on time to decomposition of high density polyethylene and chlorinated polyethylenes (Serageldin, Wang) 157
Co(II),
a sensitive kinetic–thermometric method for Co(II) determination based on the tiron–hydrogen peroxide reaction (Marcé et al) 89
Cobalt,
thermal behavior of cobalt(II) and manganese(II) complexes of 1-(2′-hydroxybenzyl)-2-(2-hydroxyphenyl)-benzimidazole (Pabhakar et al.) 385
Constant-environment calorimeter,
computer program of calculation method for a constant-environment calorimeter (Rodante, Rosati) 167
Copper(II) acetate,
solid and solution complexes of copper(II) acetate with pyridine: stoichiometry, spectral and thermodynamic characteristics (Szpakowska, Uruska) 59
Cu_2SO_2,
study of the decomposition kinetics of Cu_2SO_2 under non-isothermal conditions (Dębiński, Walczak) 1
Cu(II) trace determination,
Cu(II) trace determination by means of a catalytic thermometric method based on the hydroxylamine–hydrogen peroxide reaction (Bargallo et al.) 283

Deltatherm V differential thermal analysis,
the Deltatherm V differential thermal analysis and thermogravimetry system (Wendlandt, Dosch) 45
N,*N*-Dimethylformamide,
excess thermodynamic properties for mixtures of water and *N*,*N*-dimethylformamide at 303.15 K (Rajasekar, Reddy) 379
Dysprosium,
solid state decomposition studies on metal salicylates. Thermal decomposition of the 5-substituted dysprosium and erbium salicylato complexes (Kokkonen et al.) 79

Erbium,
solid state decomposition studies on metal salicylates. Thermal decomposition of the 5-

substituted dysprosium and erbium salicylato complexes (Kokkonen et al.) 79

$Fe_2(MoO_4)_3$–V_2O_5,
phase equilibria in the system $Fe_2(MoO_4)_3$–V_2O_5 (Walczak et al.) 9

Hydrazinium(2+) heptafluorotantalate monohydrate,
thermal decomposition study of hydrazinium(2+) heptafluorotantalate monohydrate and identification of intermediate compounds (Gantar et al.) 227

Hydroxylamine–hydrogen peroxide,
Cu(II) trace determination by means of a catalytic thermometric method based on the hydroxylamine–hydrogen peroxide reaction (Bargallo et al.) 283

Iron(III) formate,
the thermal decomposition of iron(III) formate (Morando et al) 325

Iron oxide hydrate,
kinetic parameters of dehydrating iron oxide hydrate: DTA and DTG study (Petro, Girgis) 127

Irradiated polymers,
the melting behaviour of irradiated polymers (Birkinshaw et al.) 365

KCl,
a new evaluation of the relative apparent molar enthalpies of KCl in water at 298.15 K (Sanahuja, Gómez-Estévez) 105

Lanthanide complexes,
thermodynamic stabilities of lanthanide complexes of the biologically active complexing agent, 2-acetylpyridinethiosemicarbazone (2-APT) (Singh et al.) 291

Magnesium–oxydiacetate complexes,
formation and stability of magnesium–oxydiacetate complexes at different temperatures and ionic strengths in aqueous solution (De Robertis, De Stegano) 317

Manganese(II) complexes,
thermal behavior of cobalt(II) and manganese(II) complexes of 1-(2′-hydroxybenzyl)-2-(2-hydroxyphenyl)-benzimidazole (Pabhakar et al.) 385

Montmorillonites,
the study of some normal and abnormal montmorillonites by thermal analysis and infrared spectroscopy (Crăciun) 25

Ni(II),
solid-state reactions of talc toward Ni(II) at high temperatures (Hassanein) 17

Oxalates,
the thermal decomposition of oxalates. A review (Dollimore) 331

Phenobarbiturates,
Cu(II) phenobarbiturates and *N*-methyl phenobarbiturates. Thermal decomposition processes (Jiménez et al.) 135

Phosphides,
chemistry and structural chemistry of phosphides and polyphosphides. 45. The thermal decomposition and thermodynamic properties of the alkali metal phosphides $LiP_{15}(s)$, $NaP_{15}(s)$, $KP_{15}(s)$, $RbP_{15}(s)$ and $CsP_{15}(s)$ (Santandrea et al.) 261

Polyene preparations,
determination of residual unsaturation in polyene preparations by direct injection enthalpimetry (Hansen, Eatough) 37

Poly(styrene covinyl benzyl diethyl phosphonate),
study of the thermal stability of poly(styrene covinyl benzyl diethyl phosphonate) (Boinon et al.) 177

Polypropylene,
melting behaviour of oriented isotactic polypropylene (Yadav, Jain) 97

Polyethylene,
effect of operating parameters on time to decomposition of high density polyethylene and chlorinated polyethylenes (Serageldin, Wang) 157

Pyridine,
solid and solution complexes of copper(II) acetate with pyridine: stoichiometry, spectral and thermodynamic characteristics (Szpakowska, Uruska) 59
the enthalpies of solution of tetraphenylsilane in pyridine–other solvent mixtures (Libuś et al.) 237

Salicylato complexes,
solid state decomposition studies on metal salicylates. Thermal decomposition of the 5-substituted dysprosium and erbium salicylato complexes (Kokkonen et al.) 79

Talc,
solid-state reactions of talc toward Ni(II) at high temperatures (Hassanein) 17

Tetraperoxo species,
solid state decomposition study on tetraperoxo species of transition metals. Part II. Kinetics of isothermal decomposition of $K_4[Ti(O_2)_4] \cdot 2H_2O$ (Ghosh, Jere) 73

Tetraphenylsilane,
the enthalpies of solution of tetraphenylsilane in pyridine–other solvent mixtures (Libuś et al.) 237
Tiron–hydrogen peroxide,
a sensitive kinetic–thermometric method for Co(II) determination based on the tiron–hydrogen peroxide reaction (Marcé et al.) 89
Transition metals,
solid state decomposition study on tetraperoxo species of transition metals. Part II. Kinetics of isothermal decomposition of $K_4[Ti(O_2)_4] \cdot 2H_2O$ (Ghosh, Jere) 73
Tris(ethylenediamine)cadmium(II) chloride,
some observations on the decomposition of tris(ethylenediamine)cadmium(II) chloride (House et al.) 375
Tris(ethylenediamine)chromium(III) phosphate,
catalyzed deamination of tris(ethylenediamine)chromium(III) phosphate (House et al.) 371
UNIQUAC equation,
the simultaneous correlation of excess Gibbs energies of binary systems at different temperatures by means of the UNIQUAC equation (San Millán et al.) 271
Urea,
apparent molal volume, apparent molal compressibility, verification of Jones–Dole equation and thermodynamic studies of aqueous urea and its derivatives at 25, 30, 35 and 40 °C (Pandey et al.) 245
Watterlogged woods,
thermogravimetric analysis of fresh and archeological waterlogged woods (Tomassetti et al.) 297
Zinc citrate,
thermoanalytical studies of zinc citrate, bismuth citrate and calcium citrate (Srivastava et al.) 201

CONTENTS

Study of the decomposition kinetics of Cu_2SO_2 under non-isothermal conditions
H. Dębiński and J. Walczak (Szczecin, Poland) 1
Phase equilibria in the system $Fe_2(MoO_4)_3$–V_2O_5
J. Walczak, M. Kurzawa and E. Filipek (Szczecin, Poland) 9
Solid-state reactions of talc toward Ni(II) at high temperatures
M. Hassanein (Cairo, Egypt) 17
The study of some normal and abnormal montmorillonites by thermal analysis and infrared spectroscopy
C. Crăciun (Bucharest, Romania) 25
Determination of residual unsaturation in polyene preparations by direct injection enthalpimetry
L.D. Hansen and D.J. Eatough (Provo, UT, U.S.A.) 37
The Deltatherm V differential thermal analysis and thermogravimetry system
W.W. Wendlandt (Houston, TX, U.S.A.) and E.L. Dosch (Denver, CO, U.S.A.) 45
Thermal studies on acetylenedicarboxylic acid compounds of iron(II), cobalt(II), nickel(II), copper(II) and zinc(II)
J.R. Allan, P.C. Beaumont, L. Macindoe, G.H.W. Milburn and A. Werninck (Edinburgh, Gt. Britain) 51
Solid and solution complexes of copper(II) acetate with pyridine: stoichiometry, spectral and thermodynamic characteristics
M. Szpakowska and I. Uruska (Gdańsk, Poland) 59
Solid state decomposition study on tetraperoxo species of transition metals. Part II. Kinetics of isothermal decomposition of $K_4[Ti(O_2)_4] \cdot 2H_2O$
J.K. Ghosh and G.V. Jere (New Delhi, India) 73
Solid state decomposition studies on metal salicylates. Thermal decomposition of the 5-substituted dysprosium and erbium salicylato complexes
P. Kokkonen, L.H.J. Lajunen and L. Palmu (Oulu, Finland) 79
A sensitive kinetic–thermometric method for Co(II) determination based on the tiron–hydrogen peroxide reaction
R.M. Marcé, M. Calull, F. Borrull (Tarragona, Spain) and V. Cerdà (Mallorca, Spain) 89
Melting behaviour of oriented isotactic polypropylene
Y.S. Yadav and P.C. Jain (Delhi, India) 97
A new evaluation of the relative apparent molar enthalpies of KCl in water at 298.15 K
A. Sanahuja and J.L. Gómez-Estévez (Barcelona, Spain) 105
Viscosity and densities of binary mixtures of acetonitrile with substituted anilines. Part 4
R. Palepu, A. Sullivan and G. Marangoni (Sydney, N.S., Canada) 115
Kinetic parameters of dehydrating iron oxide hydrate: DTA and DTG study
N.Sh. Petro and B.S. Girgis (Cairo, Egypt) 127
Cu(II) phenobarbiturates and *N*-methyl phenobarbiturates. Thermal decomposition processes
A. Jiménez, H. Jiménez and J. Borrás (Valencia, Spain) 135
Thermal studies on cellobiose and cellobiose halobenzoates
A. Ramachandra Rao, I.S. Gur and H.L. Bhatnagar (Kurukshetra, India) 139
Effect of operating parameters on time to decomposition of high density polyethylene and chlorinated polyethylenes
M.A. Serageldin and H. Wang (Houghton, MI, U.S.A.) 157
Computer program of calculation method for a constant-environment calorimeter
F. Rodante and R. Rosati (Rome, Italy) 167
Etude de la stabilité thermique du poly(styrène covinyl benzyl diethyl phosphonate)
B. Boinon, B. Benayad et J.P. Montheard (Saint-Etienne, France) 177
Thermal and spectroscopic studies on C-2, C-3 and C-6 substituted cellulose with different groups
R.K. Jain, K. Lal and H.L. Bhatnagar (Kurukshetra, India) 187
Thermoanalytical studies of zinc citrate, bismuth citrate and calcium citrate
A. Srivastava, V.G. Gunjikar and A.P.B. Sinha (Pune, India) 201
Binary liquid mixtures of acetonitrile with methyl, ethyl, n-propyl and n-butyl benzoates. Variation of viscosities with temperature and composition
B. Garcia and J.C. Ortega (Burgos, Spain) 219

Thermal decomposition study of hydrazinium(2 +) heptafluorotantalate monohydrate and identification of intermediate compounds
D. Gantar, A. Rahten (Ljubljana, Yugoslavia) and B. Volavšek (Maribor, Yugoslavia) 227
The enthalpies of solution of tetraphenylsilane in pyridine–other solvent mixtures
W. Libuś, J. Stangret and H. Inerowicz (Gdańsk, Poland) 237
Apparent molal volume, apparent molal compressibility, verification of Jones–Dole equation and thermodynamic studies of aqueous urea and its derivatives at 25, 30, 35 and 40 °C
J.D. Pandey, K. Misra, A. Shukla, V. Mushran and R.D. Rai (Allahabad, India) 245
Chemistry and structural chemistry of phosphides and polyphosphides. 45. The thermal decomposition and thermodynamic properties of the alkali metal phosphides LiP_{15}(s), NaP_{15}(s), KP_{15}(s), RbP_{15}(s) and CsP_{15}(s)
R.P. Santandrea, C. Mensing and H.G. von Schnering (Stuttgart, F.R.G.) 261
The simultaneous correlation of excess Gibbs energies of binary systems at different temperatures by means of the UNIQUAC equation
R. san Millán, C. Pando and J.A.R. Renuncio (Oviedo, Spain) 271
Cu(II) trace determination by means of a catalytic thermometric method based on the hydroxylamine–hydrogen peroxide reaction
L. Bargallo, F. Borrull, J. Guasch (Tarragona, Spain) and V. Cerda (Palma de Mallorca, Spain) 283
Thermodynamic stabilities of lanthanide complexes of the biologically active complexing agent, 2-acetylpyridinethiosemicarbazone (2-APT)
S. Singh, R.B. Basnet, B.S. Garg and R.P. Singh (Delhi, India) 291
Thermogravimetric analysis of fresh and archeological waterlogged woods
M. Tomassetti, L. Campanella, R. Tomellini and C. Meucci (Rome, Italy) 297
Formation and stability of magnesium–oxydiacetate complexes at different temperatures and ionic strengths in aqueous solution
A. De Robertis and C. De Stefano (Messina, Italy) 317
The thermal decomposition of iron(III) formate
P.J. Morando, N.H. Piacquadio, M.A. Blesa (Buenos Aires, Argentina) and C.O. Della Vedova (La Plata, Argentina) 325

Review

The thermal decomposition of oxalates. A review
D. Dollimore (Toledo, OH, U.S.A.) 331

Notes

The melting behaviour of irradiated polymers
C. Birkinshaw, M. Buggy, S. Daly and J.J. White (Limerick, Ireland) 365
Catalyzed deamination of tris(ethylenediamine)chromium(III) phosphate
J.E. House, Jr. and F.M. Tahir (Normal, IL, U.S.A.) 371
Some observations on the decomposition of tris(ethylenediamine)cadmium(II) chloride
J.E. House, Jr. and F.M. Tahir (Normal, IL, U.S.A.) 375
Excess thermodynamic properties for mixtures of water and *N*,*N*-dimethylformamide at 303.15 K
P. Rajasekhar and K.S. Reddy (Tirupati, India) 379
Thermal behavior of cobalt(II) and manganese(II) complexes of 1-(2′-hydroxybenzyl)-2-(2′-hydroxyphenyl)-benzimidazole
L.D. Prabhakar, K.M.M.S. Prakash and M.C. Chowdary (Anantapur, India) 385

Author Index 391

Subject Index 392